

IN THE ABSTRACT

Please replace the Abstract with the attached revised Abstract located at the end of this document.

ABSTRACT OF THE DISCLOSURE

A method is disclosed for generating computer tomography images using a 3D image reconstruction method. According to the method, to scan an object to be examined using a cone-shaped bundle of rays originating from a focal point and a planar, preferably multi-line detector for detecting the bundle of rays, the focal point is displaced along a spiral trajectory around the object to be examined. The detector delivers output data corresponding to the detected radiation and image voxels from the scanned examined object are reconstructed from the optionally pre-processed output data, the image voxels reflecting the attenuation coefficients of the respective voxel. Each image voxel is reconstructed separately from projection data, which covers a projection angular range of at least 108° and an approximate weighting is carried out for each voxel considered in order to standardise the projection data using the voxel.